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CUTLER, ALBERT H	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/806,199	TOMAT ET AL.	
	Examiner	Art Unit	
	ALBERT H. CUTLER	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-14,26-33,38-40,42-46,48-51 and 53-71* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-14,26-33,38-40,42-46,48-51 and 53-71* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is responsive to communication filed on July 14, 2008. Claims 11-14, 26-33, 38-40, 42-46, 48-51 and 53-71 are pending in the application and have been examined by the Examiner.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 14, 2008 has been entered.

Response to Arguments

3. Applicant's arguments, see page 16, filed July 14, 2008, with respect to claim 38 have been fully considered and are persuasive. Therefore, the rejection of claims 38-40, 42-46 and 48 has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Umeda et al.(US 5,920,342).

4. Applicant's arguments filed July 14, 2008 have been fully considered but they are not persuasive.

5. Applicant argues, with respect to claim 11, that all the listed steps are performed by a computer, and it is not seen how such steps could be performed by a computer other than a computer in which a display is separate from the camera.

6. With regards to the rejection of claim 11, Kawamura teaches of an external computer with a display(see 17, figure 2). Although Kawamura et al. may not teach that the display of figure 2 is used as the camera display, the feature is taught by Bullock et al.(see column 3, lines 2-10, column 4, line 34 through column 5, line 10). Bullock et al. teach that it is beneficial to use a computer display as the camera display in that a user has the entire larger display area at their disposal, and versatility of the working environment is improved because the large area of the display allows other objects not necessarily related to the capture device picture selection operations to be displayed as well(See Bullock et al., column 4, line 55 through column 5, line 10). Therefore, the combination of Kawamura and Bullock et al. teaches a computer which performs steps, and that the display of the computer is separate from the camera.

7. Applicant argues that the prior art does not teach that the computer includes an interface to which the camera is disconnectably connectable.

8. The Examiner respectfully disagrees. Bullock et al. teaches that the camera(118, figure 1) is disconnectably connectable with the computer(100) via a tether(117), column 3, lines 2-10.

9. Therefore, the rejection of claims 11-14, 26-33, 40, 42-46, 48-51 and 53 is maintained by the Examiner.

Claim Rejections - 35 USC § 102

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 43-46 and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by Umeda et al.(US 5,920,342).

Consider claim 43, Umeda et al. teach:

an apparatus(figure 1) comprising:

An interface(13, 14) for disconnectable connection to a device(An interface comprised of a PC card and a cable is disconnectably connected to a personal computer(PC, 16), column 5, lines 44-57.);

means for detecting a connection of the device to the interface(The PC detects the PC card insertion, column 7, line 58 through column 8, line 5. See also ST1, figure 7B.); and

means for controlling an output of an icon, in a predetermined area, to show the device, in case that the connection of the device to the interface is detected(See ST3, figure 7B, column 7, line 60 through column 8, line 5. When the PC card is detected, software is activated, which software displays commands(i.e. predetermined icons) and the state of the image input apparatus on the display screen(17) of the PC. An example of this display is shown in figure 5.).

Consider claim 44, and as applied to claim 43 above, Umeda et al. further teach:

the means for controlling further includes means for controlling an output of a menu to control the device(See figure 5, column 6, lines 49-55.).

Consider claim 45, and as applied to claim 43 above, Umeda et al. further teach that the predetermined area is different from a taskbar area(See figure 5.).

Consider claim 46, Bullock et al. teach:

A method(figure 7B) of image processing for an image processing apparatus(16, figure 1) which includes an interface(13, 14) for disconnectable connection to a device(image input apparatus, 1) and which is able to manipulate image data in the device(column 5, lines 44-65), the method comprising the steps of:

detecting a connection of the device to the interface(The PC detects the PC card insertion, column 7, line 58 through column 8, line 5. See also ST1, figure 7B.); and

controlling an output of an icon, in a predetermined area, to show the device, in case that the connection of the device to the interface is detected(See ST3, figure 7B, column 7, line 60 through column 8, line 5. When the PC card is detected, software is activated, which software displays commands(i.e. predetermined icons) and the state of the image input apparatus on the display screen(17) of the PC. An example of this display is shown in figure 5.).

Consider claim 48, Bullock et al. teach:

A computer-readable memory medium storing a computer-executable program(Software is installed in a personal computer(16, figure 1), column 5, lines 44-57.), executable by a computer which includes an interface(13, 14) for disconnectable connection to a device(image input apparatus, 1) and which is able to manipulate image

data in the device(column 5, lines 44-65), the computer-executable program comprising the steps of:

detecting a connection of the device to the interface(The PC detects the PC card insertion, column 7, line 58 through column 8, line 5. See also ST1, figure 7B.); and

controlling an output of an icon, in a predetermined area, to show the device, in case that the connection of the device to the interface is detected(See ST3, figure 7B, column 7, line 60 through column 8, line 5. When the PC card is detected, software is activated, which software displays commands(i.e. predetermined icons) and the state of the image input apparatus on the display screen(17) of the PC. An example of this display is shown in figure 5.).

12. Claims 49-51, and 53 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawamura et al. (US 6,522,354).

Consider claim 49, Kawamura et al. teach:

an apparatus(figures 1-3) for image processing to browse an image in a device(memory card, 21, column 5, lines 31-55, column 8, line 63 through column 9, line 4) disconnectably connected to the apparatus(column 4, lines 19-23), comprising:

means for determining whether the image is loaded or unloaded(An icon indicating if an image has been transferred to a PC, or transferred to a telephone line is output, see 51 and 52, figure 6, column 8, line 8-62.); and

means for controlling an output of information showing the image has been loaded, in case it is determined that the image is loaded(An icon indicating if an image has been transferred to a PC, or transferred to a telephone line is output, see 51 and 52, figure 6, column 8, line 8-62.).

Consider claim 50, and as applied to claim 49 above, Kawamura et al. further teach that the means for controlling further includes means for outputting together both the image and an icon showing the image has been loaded(See figure 6).

Consider claim 51, Kawamura et al. teach:

A method for image processing to browse an image in a device(column 5, lines 31-55, column 8, line 63 through column 9, line 4) disconnectably connected to the apparatus(column 4, lines 19-23), the method comprising the steps of:

determining whether an image is loaded or unloaded(An icon indicating if an image has been transferred to a PC, or transferred to a telephone line is output, see 51 and 52, figure 6, column 8, line 8-62.); and

controlling an output of information showing that the image has been loaded, in case it is determined that the image is loaded(An icon indicating if an image has been transferred to a PC, or transferred to a telephone line is output, see 51 and 52, figure 6, column 8, line 8-62.).

Consider claim 53, Kawamura et al. teach:

A computer-readable memory medium storing a computer-executable program, executable by a computer to browse an image in a device connectable to the computer(Control information(i.e. programs) are stored in memory(24), column 4, lines 25-33. Images stored in a memory(21, i.e. a device) connected to a camera are browsed, column 5, line 32 through column 6, line 3.), the computer-executable program comprising the steps of:

determining whether an image is loaded or unloaded(An icon indicating if an image has been transferred to a PC, or transferred to a telephone line is output, see 51 and 52, figure 6, column 8, line 8-62.); and

controlling an output of an information showing the image has been loaded, in case it is determined that the image is loaded(An icon indicating if an image has been transferred to a PC, or transferred to a telephone line is output, see 51 and 52, figure 6, column 8, line 8-62.).

Claim Rejections - 35 USC § 103

13. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

14. Claims 11-14, and 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al.(US 6,522,354) in view of Bullock et al.(US 5,943,050), further in view of Schelling et al.(US 5,706,097).

Consider claim 11, Kawamura et al. teach:

A computer-readable memory medium storing computer-executable process steps executable by a computer(15, figure 2) in a digital camera(11) to provide a digital camera toolbox(Control information(i.e. programs) are stored in memory(24), column 4, lines 25-33), wherein the computer(15) is part of the digital camera(see figure 2), and interface(16) to which a printer is disconnectably connectable(see column 6, lines 32-38), and an interface to an Internet service provider(26, figure 2), process steps comprising:

a displaying step to display a toolbox window, the toolbox window having at least two distinct and selectable buttons(See figure 5, column 5, lines 19-25. A "selection screen"(i.e. toolbox window is displayed) on LCD(19), figures 2 and 3.), the toolbox window including a downloading button("Transfer to PC", figure 4), a viewing button(Either button is used for viewing, as thumbnails are displayed upon the selection of either button, column 5, lines 25-55, figure 6.), a printing button(The "Transfer to PC" button is used to transfer images to a receiving device, which receiving device can be a printer, column 6, lines 36-37.), and an uploading button(The "telephone line" button uploads images via a modem, column 5, line 56 through column 6, line 3.);

a viewing step to view all thumbnail image files stored in the digital camera in a case the viewing button is selected(Either button is used for viewing, as thumbnails are displayed upon the selection of either button, column 5, lines 25-55, figure 6.);

a downloading step to download all full-resolution image files stored in the camera from the digital camera via the interface thereto in a case the downloading button is selected(The "Transfer to PC" button is used to transfer images(i.e. download

images) to a receiving device, column 6, lines 28-44. All images can be downloaded via the download button, as a subsequent screen enables the user to choose how many images to transfer, column 5, lines 20-55.);

a printing step to send a print job to the printer via the interface thereto(Images can be sent to a printer via the "Transfer to PC" button, column 6, lines 36-37.); and

an uploading step to upload all full-resolution image files stored in the digital camera to the Internet service provider via the interface thereto in a case the uploading button is selected(The "telephone line" button uploads images to another computer, a telephone line, a mail server of PC communications, or networks such as the Internet via a modem, column 5, line 56 through column 6, line 3, column 9, lines 29-32. All images can be uploaded via the upload button, as a subsequent screen enables the user to choose how many images to transfer).

However, Kawamura et al. do not explicitly teach a settings button to control settings of a digital camera when selected. Kawamura et al. teach that the digital camera(11) can be connected to an external computer(17) via an interface(16, figure 2). However, Kawamura et al. do not explicitly teach that the external computer provides the digital camera toolbox outlined above.

Bullock et al. are similar to Kawamura et al. in that Bullock et al. teach of a camera(118, figure 1) which transmits images to a PC(100, figure 1). Bullock et al. are further similar in that a digital camera toolbox is used (175, figure 4, column 4, line 55 through column 5, line 65).

However, in addition to the teachings of Kawamura et al., Bullock et al. teach that the digital camera toolbox(175, figure 4) contains a settings button(179) to control settings of a digital camera via an interface(117, figure 1, 132 and 133, figure 2, column 3, lines 40-60) when selected(column 5, lines 19-22, lines 33-36). Bullock et al. also teach of displaying at least five distinct and selectable buttons(see figure 4).

Bullock et al. also teach that an external computer (100, figure 1) provides the digital camera toolbox (i.e. that a computer to which the camera is disconnectably connectable provides the digital camera toolbox, figures 4-21, column 3, lines 49-60).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to include at least five distinct and selectable buttons including a settings button as taught by Bullock et al. in the digital camera toolbox taught by Kawamura et al. for the benefit of allowing a variety of users, novice to expert to easily control an image capture session of a digital image capture device by capturing images, evaluating images, and adjusting the camera settings to their liking in order to obtain the most desirable images(Bullock et al., column 2, lines 6-10). It also would have been obvious to a person having ordinary skill in the art at the time of the invention to implement the toolbox taught by Kawamura et al. on an external computer with a display as taught by Bullock et al. because it is beneficial to use a computer display as the camera display in that that a user has the entire larger display area at their disposal, and versatility of the working environment is improved because the large area of the display allows other objects not necessarily related to the capture device picture

selection operations to be displayed as well(See Bullock et al., column 4, line 55 through column 5, line 10).

However, the combination of Kawamura et al. and Bullock et al. does not explicitly teach that the print button is used to print a contact sheet of selected thumbnail image files stored in the camera when selected.

Schelling et al. are similar in that Schelling et al. teach of transferring images between a camera(44, figure 3) and computer(53). Schelling et al. also similarly teach of sending images to a printer(column 3, line 52 through column 4, line 7).

In addition to the combined teachings of Kawamura et al., and Bullock et al., Schelling et al. teach that a contact sheet("index print") of selected thumbnail image files originally stored in the digital camera is printed(column 2, lines 43-48, column 3, lines 37-39, column 3, line 53 through column 4, line 8, figures 1, 3, 4, and 5.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have the print button taught by the combination of Kawamura et al. and Bullock et al. print a contact sheet of selected thumbnail images as taught by Schelling et al. for the benefit of aiding a user in determining what is contained on an image recording medium, and easily locating specific files within the medium for access (Schelling et al., column 1, lines 50-55).

Consider claim 12, and as applied to claim 11 above, Kawamura et al. further teach that the controlling step includes a step to control download and upload parameters(Kawamura et al. teach that a user can choose which images, and how

many to download or upload(i.e. control download and upload parameters), column 5, lines 26-55.).

Consider claim 13, and as applied to claim 11 above, Kawamura et al. teach that the downloading step can involve transmitting images to a printer(see claim 11 rationale). However, the combination of Kawamura et al. and Bullock et al. do not explicitly teach that the downloading step comprises a downloading step to download all thumbnail image files stored in the camera.

Schelling et al. teach of sending all thumbnail image files to a printer in order to produce an index print(column 2, lines 43-48, column 3, lines 37-39, column 3, line 53 through column 4, line 8, figures 1, 3, 4, and 5.).

Therefore, because Kawamura et al. teach that the download step can involve downloading to a printer, and Schelling teaches that all thumbnail images are sent to a printer, the combination of Kawamura et al., Bullock et al., and Schelling teaches that the downloading step comprises a downloading step to download all thumbnail image files stored in the camera.

Consider claim 14, and as applied to claim 11 above, Kawamura et al. teach that the downloading step comprises a downloading step to download all sound files stored in the camera(column 9, line 66 through column 10, line 10).

Consider claim 26, Kawamura et al. teach:

A method to provide a digital camera toolbox(figures 4-21) on a computer(15, column 5, line 19 through column 10, line 7), wherein the computer(15) is part of the digital camera(11, figure 2), and interface(16) to which a printer is connectable(see column 6, lines 32-38), and an interface to an Internet service provider(26, figure 2), wherein said method comprises, the process steps comprising:

displaying a toolbox window, the toolbox window having at least two distinct and selectable buttons(See figure 5, column 5, lines 19-25. A “selection screen”(i.e. toolbox window is displayed) on LCD(19), figures 2 and 3.), including a downloading button(“Transfer to PC”, figure 4), a viewing button(Either button is used for viewing, as thumbnails are displayed upon the selection of either button, column 5, lines 25-55, figure 6.), a printing button(The “Transfer to PC” button is used to transfer images to a receiving device, which receiving device can be a printer, column 6, lines 36-37.), and an uploading button(The “telephone line” button uploads images via a modem, column 5, line 56 through column 6, line 3.);

viewing all thumbnail image files stored in the digital camera in a case the viewing button is selected(Either button is used for viewing, as thumbnails are displayed upon the selection of either button, column 5, lines 25-55, figure 6.);

downloading all full-resolution image files stored in the digital camera from the digital camera via an interface thereto(16) in a case the downloading button is selected(The “Transfer to PC” button is used to transfer images(i.e. download images) to a receiving device, column 6, lines 28-44. All images can be downloaded via the

download button, as a subsequent screen enables the user to choose how many images to transfer, column 5, lines 20-55.);

a downloading step to download all full-resolution image files stored in the camera in a case the downloading button is selected(The "Transfer to PC" button is used to transfer images(i.e. download images) to a receiving device, column 6, lines 28-44. All images can be downloaded via the download button, as a subsequent screen enables the user to choose how many images to transfer, column 5, lines 20-55.);

sending a print job to the printer via the interface thereto so as to print in a case the printing button is selected(Images can be sent to a printer via the "Transfer to PC" button, column 6, lines 36-37.); and

uploading all full-resolution image files stored in the digital camera to the Internet service provider via the interface thereto in a case the uploading button is selected(The "telephone line" button uploads images to another computer, a telephone line, a mail server of PC communications, or networks such as the Internet via a modem, column 5, line 56 through column 6, line 3, column 9, lines 29-32. All images can be uploaded via the upload button, as a subsequent screen enables the user to choose how many images to transfer).

However, Kawamura et al. do not explicitly teach a settings button to control settings of a digital camera when selected. Kawamura et al. teach that the digital camera(11) can be connected to an external computer(17) via an interface(16, figure 2). However, Kawamura et al. do not explicitly teach that the external computer provides the digital camera toolbox outlined above.

Bullock et al. are similar to Kawamura et al. in that Bullock et al. teach of a camera(118, figure 1) which transmits images to a PC(100, figure 1). Bullock et al. are further similar in that a digital camera toolbox is used(175, figure 4, column 4, line 55 through column 5, line 65).

However, in addition to the teachings of Kawamura et al., Bullock et al. teach that the digital camera toolbox(175, figure 4) contains a settings button(179) to control settings of a digital camera via an interface(117, figure 1, 132 and 133, figure 2, column 3, lines 40-60) thereto when selected(column 5, lines 19-22, lines 33-36). Bullock et al. also teach of displaying at least five distinct and selectable buttons (see figure 4).

Bullock et al. also teach that an external computer (100, figure 1) provides the digital camera toolbox(i.e. that a computer to which the camera is disconnectably connectable provides the digital camera toolbox, figures 4-21, column 3, lines 49-60).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to include a settings button as taught by Bullock et al. in the digital camera toolbox taught by Kawamura et al. for the benefit of allowing a variety of users, novice to expert to easily control an image capture session of a digital image capture device by capturing images, evaluating images, and adjusting the camera settings to their liking in order to obtain the most desirable images(Bullock et al., column 2, lines 6-10). It also would have been obvious to a person having ordinary skill in the art at the time of the invention to implement the toolbox taught by Kawamura et al. on an external computer with a display as taught by Bullock et al. because it is beneficial to use a computer display as the camera display in that that a user has the entire larger

display area at their disposal, and versatility of the working environment is improved because the large area of the display allows other objects not necessarily related to the capture device picture selection operations to be displayed as well(See Bullock et al., column 4, line 55 through column 5, line 10).

However, the combination of Kawamura et al. and Bullock et al. does not explicitly teach that the print button is used to print a contact sheet of selected thumbnail image files stored in the camera when selected.

Schelling et al. are similar in that Schelling et al. teach of transferring images between a camera(44, figure 3) and computer(53). Schelling et al. also similarly teach of sending images to a printer(column 3, line 52 through column 4, line 7).

In addition to the combined teachings of Kawamura et al., and Bullock et al., Schelling et al. teach that a contact sheet("index print") of selected thumbnail image files originally stored in the camera is printed(column 2, lines 43-48, column 3, lines 37-39, column 3, line 53 through column 4, line 8, figures 1, 3, 4, and 5.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have the print button taught by the combination of Kawamura et al. and Bullock et al. print a contact sheet of selected thumbnail images as taught by Schelling et al. for the benefit of aiding a user in determining what is contained on an image recording medium, and easily locating specific files within the medium for access (Schelling et al., column 1, lines 50-55).

Consider claim 27, and as applied to claim 26 above, Kawamura et al. further teach that the controlling step includes a step to control download and upload parameters(Kawamura et al. teach that a user can choose which images, and how many to download or upload(i.e. control download and upload parameters), column 5, lines 26-55.).

Consider claim 28, and as applied to claim 26 above, Kawamura et al. teach that the downloading step can involve transmitting images to a printer(see claim 11 rationale). However, the combination of Kawamura et al. and Bullock et al. do not explicitly teach that the downloading step comprises a downloading step to download all thumbnail image files stored in the camera.

Schelling et al. teach of sending all thumbnail image files to a printer in order to produce an index print(column 2, lines 43-48, column 3, lines 37-39, column 3, line 53 through column 4, line 8, figures 1, 3, 4, and 5.).

Therefore, because Kawamura et al. teach that the download step can involve downloading to a printer, and Schelling teaches that all thumbnail images are sent to a printer, the combination of Kawamura et al., Bullock et al., and Schelling teaches that the downloading step comprises a downloading step to download all thumbnail image files stored in the camera.

Consider claim 29, and as applied to claim 26 above, Kawamura et al. teach that the downloading step comprises a downloading step to download all sound files stored in the camera(column 9, line 66 through column 10, line 10).

Consider claim 30, Kawamura et al. teach:

An apparatus (figure 2) comprising:

An interface (16) to which a digital camera (11) is connectable(see figure 2);

An interface (16) to which a printer is connectable(see column 6, lines 32-38);

An interface to an Internet service provider (26, figure 2);

a program memory for storing executable process steps(Control information(i.e. programs) are stored in memory(24), column 4, lines 25-33); and

a processor(15, figure 2) for executing the process steps stored in said program memory(column 4, line 8 through column 7, line 67).

Wherein the executable process steps comprise:

a displaying step to display a toolbox window, the toolbox window having at least two distinct and selectable buttons(See figure 5, column 5, lines 19-25. A “selection screen”(i.e. toolbox window is displayed) on LCD(19), figures 2 and 3.), the toolbox window including a downloading button(“Transfer to PC”, figure 4), a viewing button(Either button is used for viewing, as thumbnails are displayed upon the selection of either button, column 5, lines 25-55, figure 6.), a printing button(The “Transfer to PC” button is used to transfer images to a receiving device, which receiving device can be a

printer, column 6, lines 36-37.), and an uploading button(The “telephone line” button uploads images via a modem, column 5, line 56 through column 6, line 3.);

a viewing step to view all thumbnail image files stored in the digital camera in a case the viewing button is selected(Either button is used for viewing, as thumbnails are displayed upon the selection of either button, column 5, lines 25-55, figure 6.);

a downloading step to download all full-resolution image files stored in the camera from the digital camera via the interface thereto in a case the downloading button is selected(The “Transfer to PC” button is used to transfer images(i.e. download images) to a receiving device, column 6, lines 28-44. All images can be downloaded via the download button, as a subsequent screen enables the user to choose how many images to transfer, column 5, lines 20-55.);

a printing step to send a print job to the printer via the interface thereto(Images can be sent to a printer via the “Transfer to PC” button, column 6, lines 36-37.); and

an uploading step to upload all full-resolution image files stored in the digital camera to the Internet service provider via the interface thereto in a case the uploading button is selected(The “telephone line” button uploads images to another computer, a telephone line, a mail server of PC communications, or networks such as the Internet via a modem, column 5, line 56 through column 6, line 3, column 9, lines 29-32. All images can be uploaded via the upload button, as a subsequent screen enables the user to choose how many images to transfer).

However, Kawamura et al. do not explicitly teach a settings button to control settings of a digital camera when selected. Kawamura et al. teach that the digital

camera(11) can be connected to an external computer(17) via an interface(16, figure 2). However, Kawamura et al. do not explicitly teach that the external computer provides the digital camera toolbox outlined above.

Bullock et al. are similar to Kawamura et al. in that Bullock et al. teach of a camera(118, figure 1) which transmits images to a PC(100, figure 1). Bullock et al. are further similar in that a digital camera toolbox is used(175, figure 4, column 4, line 55 through column 5, line 65).

However, in addition to the teachings of Kawamura et al., Bullock et al. teach that the digital camera toolbox(175, figure 4) contains a settings button(179) to control settings of a digital camera via an interface(117, figure 1, 132 and 133, figure 2, column 3, lines 40-60) when selected(column 5, lines 19-22, lines 33-36). Bullock et al. also teach of displaying at least five distinct and selectable buttons(see figure 4).

Bullock et al. also teach that an external computer(100, figure 1) provides the digital camera toolbox(i.e. that a computer to which the camera is disconnectably connectable provides the digital camera toolbox, figures 4-21, column 3, lines 49-60).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to include at least five distinct and selectable buttons including a settings button as taught by Bullock et al. in the digital camera toolbox taught by Kawamura et al. for the benefit of allowing a variety of users, novice to expert to easily control an image capture session of a digital image capture device by capturing images, evaluating images, and adjusting the camera settings to their liking in order to obtain the most desirable images(Bullock et al., column 2, lines 6-10). It also would

have been obvious to a person having ordinary skill in the art at the time of the invention to implement the toolbox taught by Kawamura et al. on an external computer with a display as taught by Bullock et al. because it is beneficial to use a computer display as the camera display in that that a user has the entire larger display area at their disposal, and versatility of the working environment is improved because the large area of the display allows other objects not necessarily related to the capture device picture selection operations to be displayed as well(See Bullock et al., column 4, line 55 through column 5, line 10).

However, the combination of Kawamura et al. and Bullock et al. does not explicitly teach that the print button is used to print a contact sheet of selected thumbnail image files stored in the camera when selected.

Schelling et al. are similar in that Schelling et al. teach of transferring images between a camera(44, figure 3) and computer(53). Schelling et al. also similarly teach of sending images to a printer(column 3, line 52 through column 4, line 7).

In addition to the combined teachings of Kawamura et al., and Bullock et al., Schelling et al. teach that a contact sheet("index print") of selected thumbnail image files originally stored in the digital camera is printed(column 2, lines 43-48, column 3, lines 37-39, column 3, line 53 through column 4, line 8, figures 1, 3, 4, and 5.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have the print button taught by the combination of Kawamura et al. and Bullock et al. print a contact sheet of selected thumbnail images as taught by Schelling et al. for the benefit of aiding a user in determining what is contained

on an image recording medium, and easily locating specific files within the medium for access(Schelling et al., column 1, lines 50-55).

Consider claim 31, and as applied to claim 30 above, Kawamura et al. further teach the step to control includes process steps to control the download and upload parameters(Kawamura et al. teach that a user can choose which images, and how many to download or upload(i.e. control download and upload parameters), column 5, lines 26-55.).

Consider claim 32, and as applied to claim 30 above, Kawamura et al. teach that the downloading step can involve transmitting images to a printer(see claim 11 rationale). However, the combination of Kawamura et al. and Bullock et al. do not explicitly teach that the downloading step comprises a downloading step to download all thumbnail image files stored in the camera.

Schelling et al. teach of sending all thumbnail image files to a printer in order to produce an index print(column 2, lines 43-48, column 3, lines 37-39, column 3, line 53 through column 4, line 8, figures 1, 3, 4, and 5.).

Therefore, because Kawamura et al. teach that the download step can involve downloading to a printer, and Schelling teaches that all thumbnail images are sent to a printer, the combination of Kawamura et al., Bullock et al., and Schelling teaches that the downloading step comprises a downloading step to download all thumbnail image files stored in the camera.

Consider claim 33, and as applied to claim 30 above, Kawamura et al. teach the step to download all sound files stored in the camera(column 9, line 66 through column 10, line 10).

15. Claims 54, 56 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al., Bullock et al. and Schelling et al. as applied to claims 11, 26 and 30 above, and further in view of Umeda et al.(US 5,920,342).

Consider claim 54, and as applied to claim 11 above, the combination of Kawamura et al., Bullock et al. and Schelling et al. does not explicitly teach of a means for detecting a connection of the camera to the interface, or that the plurality of icons is output based upon the detection.

Umeda et al. similarly teaches an interface(13, 14, figure 1) for disconnectable connection to a device(An interface comprised of a PC card and a cable is disconnectably connected to a personal computer(PC, 16), column 5, lines 44-57.);

However, in addition to the teachings of the combination of Kawamura et al., Bullock et al. and Schelling et al., Umeda et al. teaches means for detecting a connection of the camera to the interface(The PC detects the PC card insertion, column 7, line 58 through column 8, line 5. See also ST1, figure 7B.), and that the step of displaying is responsive to the detection of the connection of the digital camera to the interface(See ST3, figure 7B, column 7, line 60 through column 8, line 5. When the PC

card is detected, software is activated, which software displays commands(i.e. predetermined icons) and the state of the image input apparatus on the display screen(17) of the PC. An example of this display is shown in figure 5.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to provide the detection means taught by Umeda et al. in the device interface taught by the combination of Kawamura et al., Bullock et al. and Schelling et al. for the benefit of automating the previously manual task of activating the camera software on the computer(Umeda et al., column 7, line 60 through column 8, line 5).

Consider claim 56, and as applied to claim 26 above, the combination of Kawamura et al., Bullock et al. and Schelling et al. does not explicitly teach of a means for detecting a connection of the camera to the interface, or that the plurality of icons is output based upon the detection.

Umeda et al. similarly teaches an interface(13, 14, figure 1) for disconnectable connection to a device(An interface comprised of a PC card and a cable is disconnectably connected to a personal computer(PC, 16), column 5, lines 44-57.);

However, in addition to the teachings of the combination of Kawamura et al., Bullock et al. and Schelling et al., Umeda et al. teaches means for detecting a connection of the camera to the interface(The PC detects the PC card insertion, column 7, line 58 through column 8, line 5. See also ST1, figure 7B.), and that the step of displaying is responsive to the detection of the connection of the digital camera to the

interface(See ST3, figure 7B, column 7, line 60 through column 8, line 5. When the PC card is detected, software is activated, which software displays commands(i.e. predetermined icons) and the state of the image input apparatus on the display screen(17) of the PC. An example of this display is shown in figure 5.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to provide the detection means taught by Umeda et al. in the device interface taught by the combination of Kawamura et al., Bullock et al. and Schelling et al. for the benefit of automating the previously manual task of activating the camera software on the computer(Umeda et al., column 7, line 60 through column 8, line 5).

Consider claim 58, and as applied to claim 30 above, the combination of Kawamura et al., Bullock et al. and Schelling et al. does not explicitly teach of a means for detecting a connection of the camera to the interface, or that the plurality of icons is output based upon the detection.

Umeda et al. similarly teaches an interface(13, 14, figure 1) for disconnectable connection to a device(An interface comprised of a PC card and a cable is disconnectably connected to a personal computer(PC, 16), column 5, lines 44-57.);

However, in addition to the teachings of the combination of Kawamura et al., Bullock et al. and Schelling et al., Umeda et al. teaches means for detecting a connection of the camera to the interface(The PC detects the PC card insertion, column 7, line 58 through column 8, line 5. See also ST1, figure 7B.), and that the step of

displaying is responsive to the detection of the connection of the digital camera to the interface(See ST3, figure 7B, column 7, line 60 through column 8, line 5. When the PC card is detected, software is activated, which software displays commands(i.e. predetermined icons) and the state of the image input apparatus on the display screen(17) of the PC. An example of this display is shown in figure 5.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to provide the detection means taught by Umeda et al. in the device interface taught by the combination of Kawamura et al., Bullock et al. and Schelling et al. for the benefit of automating the previously manual task of activating the camera software on the computer(Umeda et al., column 7, line 60 through column 8, line 5).

16. Claims 55, 57 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al., Bullock et al., Schelling et al. and Umeda et al. as applied to claims 54, 56 and 58 above, and further in view of Sasaki et al.(EP 0738076 A2).

Consider claim 55, and as applied to claim 54 above, the combination of Kawamura et al., Bullock et al., Schelling et al. and Umeda et al. teaches of a detection means, but does not explicitly teach that said detection means detects disconnection of the digital camera from the interface.

Sasaki et al. similarly teaches of displaying a camera operation screen(figure 24) when an external device including a display is connected to a camera(See figures 24 and 25, column 18, line 48 through column 19, line 22).

However, in addition to the teachings of the combination of Kawamura et al., Bullock et al., Schelling et al. and Umeda et al., Sasaki et al. teaches that a means for detection further comprises means for detecting disconnection of the camera from the interface(See S201, S205, S206, S207, figure 26, column 19, line 55 through column 20, line 8, column 20, lines 32-56. Sasaki et al. teaches that if it is determined that the external camera is disconnected(S206), then busy/no reply results are displayed on the screen(S207).).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have the detection means taught by the combination of Kawamura et al., Bullock et al., Schelling et al. and Umeda et al. detect disconnection of the device from the interface as taught by Sasaki et al. for the benefit of preventing user confusion and saving power by ending processing(Sasaki et al., column 20, lines 51-56).

Consider claim 57, and as applied to claim 56 above, the combination of Kawamura et al., Bullock et al., Schelling et al. and Umeda et al. teaches of a detection means, but does not explicitly teach that said detection means detects disconnection of the digital camera from the interface.

Sasaki et al. similarly teaches of displaying a camera operation screen(figure 24) when an external device including a display is connected to a camera(See figures 24 and 25, column 18, line 48 through column 19, line 22).

However, in addition to the teachings of the combination of Kawamura et al., Bullock et al., Schelling et al. and Umeda et al., Sasaki et al. teaches that a means for detection further comprises means for detecting disconnection of the camera from the interface(See S201, S205, S206, S207, figure 26, column 19, line 55 through column 20, line 8, column 20, lines 32-56. Sasaki et al. teaches that if it is determined that the external camera is disconnected(S206), then busy/no reply results are displayed on the screen(S207).).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have the detection means taught by the combination of Kawamura et al., Bullock et al., Schelling et al. and Umeda et al. detect disconnection of the device from the interface as taught by Sasaki et al. for the benefit of preventing user confusion and saving power by ending processing(Sasaki et al., column 20, lines 51-56).

Consider claim 59, and as applied to claim 58 above, the combination of Kawamura et al., Bullock et al., Schelling et al. and Umeda et al. teaches of a detection means, but does not explicitly teach that said detection means detects disconnection of the digital camera from the interface.

Sasaki et al. similarly teaches of displaying a camera operation screen(figure 24) when an external device including a display is connected to a camera(See figures 24 and 25, column 18, line 48 through column 19, line 22).

However, in addition to the teachings of the combination of Kawamura et al., Bullock et al., Schelling et al. and Umeda et al., Sasaki et al. teaches that a means for detection further comprises means for detecting disconnection of the camera from the interface(See S201, S205, S206, S207, figure 26, column 19, line 55 through column 20, line 8, column 20, lines 32-56. Sasaki et al. teaches that if it is determined that the external camera is disconnected(S206), then busy/no reply results are displayed on the screen(S207).).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have the detection means taught by the combination of Kawamura et al., Bullock et al., Schelling et al. and Umeda et al. detect disconnection of the device from the interface as taught by Sasaki et al. for the benefit of preventing user confusion and saving power by ending processing(Sasaki et al., column 20, lines 51-56).

17. Claims 38-40 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. in view of Umeda et al.

Consider claim 38, Bullock et al. teach:

An apparatus(figures 1-4) comprising:

An interface for disconnectable connection to a device(117, figure 1, 132 and 133, figure 2, column 3, lines 40-60);

means for connecting the device to the interface(By starting the "Capture Device" application, a connection to a camera is detected, column 5, lines 40-45, column 8, lines 59-63, step 302, figure 19a.); and

means for controlling an output of at least one of a plurality of icons for setting the device, in case of the connection of the device to the interface(See step 304, figure 19a, column 8, line 66 through column 9, line 5, figure 4, column 5, lines 40-47. A window showing the device("capture device", figure 4) is output. This window contains various operational icons including a settings icon(179, i.e. at least one of a plurality of icons) for setting the camera(column 5, lines 19-22, lines 33-36).).

However, Bullock et al. does not explicitly teach of a means for detecting a connection of the device to the interface, or that the plurality of icons is output based upon the detection.

Umeda et al. similarly teaches an interface(13, 14, figure 1) for disconnectable connection to a device(An interface comprised of a PC card and a cable is disconnectably connected to a personal computer(PC, 16), column 5, lines 44-57.);

However, in addition to the teachings of Bullock et al., Umeda et al. teaches means for detecting a connection of the device to the interface(The PC detects the PC card insertion, column 7, line 58 through column 8, line 5. See also ST1, figure 7B.), and means for controlling an output of a plurality of icons, in case that the connection of the device to the interface is detected(See ST3, figure 7B, column 7, line 60 through

column 8, line 5. When the PC card is detected, software is activated, which software displays commands(i.e. predetermined icons) and the state of the image input apparatus on the display screen(17) of the PC. An example of this display is shown in figure 5.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to provide the detection means taught by Umeda et al. in the device interface taught by Bullock et al. for the benefit of automating the previously manual task of activating the camera software on the computer(Umeda et al., column 7, line 60 through column 8, line 5).

Consider claim 39, and as applied to claim 38 above, Bullock et al. further teach the that the means for controlling further includes means for controlling an output of the plurality of icons together in a window(175, figure 4, column 5, lines 10-32).

Consider claim 40, Bullock et al. teach:

A method of image processing for an image processing apparatus which includes an interface(117, figure 1, 132 and 133, figure 2, column 3, lines 40-60) for disconnectable connection to a device(118, figure 1) and which is able to manipulate image data in the device(figure 19a), the method comprising the steps of:

connection of the device to the interface(By starting the “Capture Device” application, a connection of the camera is detected, column 5, lines 40-45, column 8, lines 59-63, step 302, figure 19a.); and

controlling an output of at least one of a plurality of icons for setting the device, in case of the connection of the device to the interface(See step 304, figure 19a, column 8, line 66 through column 9, line 5, figure 4, column 5, lines 40-47. A window showing the device("capture device", figure 4) is output. This window contains various operational icons including a settings icon(179, i.e. at least one of a plurality of icons) for setting the camera(column 5, lines 19-22, lines 33-36).).

However, Bullock et al. does not explicitly teach of a means for detecting a connection of the device to the interface, or that the plurality of icons is output based upon the detection.

Umeda et al. similarly teaches an interface(13, 14, figure 1) for disconnectable connection to a device(An interface comprised of a PC card and a cable is disconnectably connected to a personal computer(PC, 16), column 5, lines 44-57.);

However, in addition to the teachings of Bullock et al., Umeda et al. teaches means for detecting a connection of the device to the interface(The PC detects the PC card insertion, column 7, line 58 through column 8, line 5. See also ST1, figure 7B.), and means for controlling an output of a plurality of icons, in case that the connection of the device to the interface is detected(See ST3, figure 7B, column 7, line 60 through column 8, line 5. When the PC card is detected, software is activated, which software displays commands(i.e. predetermined icons) and the state of the image input apparatus on the display screen(17) of the PC. An example of this display is shown in figure 5.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to provide the detection means taught by Umeda et al. in the device interface taught by Bullock et al. for the benefit of automating the previously manual task of activating the camera software on the computer(Umeda et al., column 7, line 60 through column 8, line 5).

Consider claim 42, Bullock et al. teach:

A computer-readable memory medium("RAM", 124) storing a computer-executable program(figure 3), executable by a computer(100, figure 1) which includes an interface(117, figure 1, 132 and 133, figure 2, column 3, lines 40-60) for disconnectable connection to a device(118, figure 1) and which is able to manipulate image data in the device(figure 19a), the computer-executable program comprising the steps of:

connection of the device to the interface(By starting the "Capture Device" application, a connection of the camera is detected, column 5, lines 40-45, column 8, lines 59-63, step 302, figure 19a.); and

controlling an output of at least one of a plurality of icons for setting the device, in case of the connection of the device to the interface(See step 304, figure 19a, column 8, line 66 through column 9, line 5, figure 4, column 5, lines 40-47. A window showing the device("capture device", figure 4) is output. This window contains various operational icons including a settings icon(179, i.e. at least one of a plurality of icons) for setting the camera(column 5, lines 19-22, lines 33-36).).

However, Bullock et al. does not explicitly teach of a means for detecting a connection of the device to the interface, or that the plurality of icons is output based upon the detection.

Umeda et al. similarly teaches an interface(13, 14, figure 1) for disconnectable connection to a device(An interface comprised of a PC card and a cable is disconnectably connected to a personal computer(PC, 16), column 5, lines 44-57.);

However, in addition to the teachings of Bullock et al., Umeda et al. teaches means for detecting a connection of the device to the interface(The PC detects the PC card insertion, column 7, line 58 through column 8, line 5. See also ST1, figure 7B.), and means for controlling an output of a plurality of icons, in case that the connection of the device to the interface is detected(See ST3, figure 7B, column 7, line 60 through column 8, line 5. When the PC card is detected, software is activated, which software displays commands(i.e. predetermined icons) and the state of the image input apparatus on the display screen(17) of the PC. An example of this display is shown in figure 5.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to provide the detection means taught by Umeda et al. in the device interface taught by Bullock et al. for the benefit of automating the previously manual task of activating the camera software on the computer(Umeda et al., column 7, line 60 through column 8, line 5).

18. Claims 60, 61 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. in view of Umeda et al. as applied to claims 38, 49 and 42 above, and further in view of Sasaki et al.(EP 0738076 A2).

Consider claim 60, and as applied to claim 38 above, Umeda et al. teaches of a means for detection(see claim 38 rationale). However, the combination of Bullock et al. and Umeda et al. does not explicitly teach that said means for detection further comprises means for detecting disconnection of the device from the interface.

Sasaki et al. similarly teaches of displaying a camera operation screen(figure 24) when an external device including a display is connected to a camera(See figures 24 and 25, column 18, line 48 through column 19, line 22).

However, in addition to the teachings of Bullock et al. and Umeda et al., Sasaki et al. teaches that a means for detection further comprises means for detecting disconnection of the device from the interface(See S201, S205, S206, S207, figure 26, column 19, line 55 through column 20, line 8, column 20, lines 32-56. Sasaki et al. teaches that if it is determined that the external camera is disconnected(S206), then busy/no reply results are displayed on the screen(S207).).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have the detection means taught by the combination of Bullock et al. and Umeda et al. detect disconnection of the device from the interface as taught by Sasaki et al. for the benefit of preventing user confusion and saving power by ending processing(Sasaki et al., column 20, lines 51-56).

Consider claim 61, and as applied to claim 40 above, Umeda et al. teaches of a means for detection(see claim 40 rationale). However, the combination of Bullock et al. and Umeda et al. does not explicitly teach that said means for detection further comprises means for detecting disconnection of the device from the interface.

Sasaki et al. similarly teaches of displaying a camera operation screen(figure 24) when an external device including a display is connected to a camera(See figures 24 and 25, column 18, line 48 through column 19, line 22).

However, in addition to the teachings of Bullock et al. and Umeda et al., Sasaki et al. teaches that a means for detection further comprises means for detecting disconnection of the device from the interface(See S201, S205, S206, S207, figure 26, column 19, line 55 through column 20, line 8, column 20, lines 32-56. Sasaki et al. teaches that if it is determined that the external camera is disconnected(S206), then busy/no reply results are displayed on the screen(S207).).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have the detection means taught by the combination of Bullock et al. and Umeda et al. detect disconnection of the device from the interface as taught by Sasaki et al. for the benefit of preventing user confusion and saving power by ending processing(Sasaki et al., column 20, lines 51-56).

Consider claim 62, and as applied to claim 42 above, Umeda et al. teaches of a means for detection(see claim 42 rationale). However, the combination of Bullock et al.

and Umeda et al. does not explicitly teach that said means for detection further comprises means for detecting disconnection of the device from the interface.

Sasaki et al. similarly teaches of displaying a camera operation screen(figure 24) when an external device including a display is connected to a camera(See figures 24 and 25, column 18, line 48 through column 19, line 22).

However, in addition to the teachings of Bullock et al. and Umeda et al., Sasaki et al. teaches that a means for detection further comprises means for detecting disconnection of the device from the interface(See S201, S205, S206, S207, figure 26, column 19, line 55 through column 20, line 8, column 20, lines 32-56. Sasaki et al. teaches that if it is determined that the external camera is disconnected(S206), then busy/no reply results are displayed on the screen(S207).).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have the detection means taught by the combination of Bullock et al. and Umeda et al. detect disconnection of the device from the interface as taught by Sasaki et al. for the benefit of preventing user confusion and saving power by ending processing(Sasaki et al., column 20, lines 51-56).

19. Claims 63, 64 and 65 rejected under 35 U.S.C. 103(a) as being unpatentable over Umeda et al. in view of Sasaki et al.(EP 0738076 A2).

Consider claim 63, and as applied to claim 43 above, Umeda et al. teaches of a means for detection(see claim 43 rationale). However, Umeda et al. does not explicitly

teach that said means for detection further comprises means for detecting disconnection of the device from the interface.

Sasaki et al. similarly teaches of displaying a camera operation screen(figure 24) when an external device including a display is connected to a camera(See figures 24 and 25, column 18, line 48 through column 19, line 22).

However, in addition to the teachings of Umeda et al., Sasaki et al. teaches that a means for detection further comprises means for detecting disconnection of the device from the interface(See S201, S205, S206, S207, figure 26, column 19, line 55 through column 20, line 8, column 20, lines 32-56. Sasaki et al. teaches that if it is determined that the external camera is disconnected(S206), then busy/no reply results are displayed on the screen(S207).).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have the detection means taught by Umeda et al. detect disconnection of the device from the interface as taught by Sasaki et al. for the benefit of preventing user confusion and saving power by ending processing(Sasaki et al., column 20, lines 51-56).

Consider claim 64, and as applied to claim 46 above, Umeda et al. teaches of a means for detection(see claim 46 rationale). However, Umeda et al. does not explicitly teach that said means for detection further comprises means for detecting disconnection of the device from the interface.

Sasaki et al. similarly teaches of displaying a camera operation screen(figure 24) when an external device including a display is connected to a camera(See figures 24 and 25, column 18, line 48 through column 19, line 22).

However, in addition to the teachings of Umeda et al., Sasaki et al. teaches that a means for detection further comprises means for detecting disconnection of the device from the interface(See S201, S205, S206, S207, figure 26, column 19, line 55 through column 20, line 8, column 20, lines 32-56. Sasaki et al. teaches that if it is determined that the external camera is disconnected(S206), then busy/no reply results are displayed on the screen(S207).).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have the detection means taught by Umeda et al. detect disconnection of the device from the interface as taught by Sasaki et al. for the benefit of preventing user confusion and saving power by ending processing(Sasaki et al., column 20, lines 51-56).

Consider claim 65, and as applied to claim 48 above, Umeda et al. teaches of a means for detection(see claim 48 rationale). However, Umeda et al. does not explicitly teach that said means for detection further comprises means for detecting disconnection of the device from the interface.

Sasaki et al. similarly teaches of displaying a camera operation screen(figure 24) when an external device including a display is connected to a camera(See figures 24 and 25, column 18, line 48 through column 19, line 22).

However, in addition to the teachings of Umeda et al., Sasaki et al. teaches that a means for detection further comprises means for detecting disconnection of the device from the interface(See S201, S205, S206, S207, figure 26, column 19, line 55 through column 20, line 8, column 20, lines 32-56. Sasaki et al. teaches that if it is determined that the external camera is disconnected(S206), then busy/no reply results are displayed on the screen(S207).).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have the detection means taught by Umeda et al. detect disconnection of the device from the interface as taught by Sasaki et al. for the benefit of preventing user confusion and saving power by ending processing(Sasaki et al., column 20, lines 51-56).

20. Claims 66-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura et al. in view of Tokano(EP 0660485 A2).

Consider claim 66, and as applied to claim 49 above, Kawamura et al. does not explicitly teach a means for detecting a connection of the device to the apparatus.

Tokano similarly teaches an apparatus(camera, 18, figure 6) connected to a device(solid state memory pack, 14b, figure 6), column 6, line 20 through column 7, line 25.

However, in addition to the teachings of Kawamura et al., Tokano teaches a means for detecting a connection of the device to the apparatus(A disconnection

connection switch(17) is monitored, to determine if the camera is connected to the memory pack, column 7, lines 6-25.), and that further operations are only performed upon such a detection(When proper connection is determined, the process proceeds to the next step, column 7, lines 23-35, figure 8.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to include the detecting means taught by Tokano in the device/apparatus interface taught by Kawamura et al., and have the determining means operative in response to the detection for the benefit of preventing user confusion, and providing valuable feedback in the case of an improper connection(Tokano, column 7, lines 13-25).

Consider claim 67, and as applied to claim 66 above, Kawamura et al. does not explicitly teach of a detection means. However, Tokano teaches that the detecting means further comprises means for detecting disconnection of the device from the apparatus(Disconnection is detected via the disconnection connection switch(17), column 7, lines 13-25.).

Consider claim 68, and as applied to claim 51 above, Kawamura et al. does not explicitly teach a means for detecting a connection of the device to the apparatus.

Tokano similarly teaches an apparatus(camera, 18, figure 6) connected to a device(solid state memory pack, 14b, figure 6), column 6, line 20 through column 7, line 25.

However, in addition to the teachings of Kawamura et al., Tokano teaches a means for detecting a connection of the device to the apparatus(A disconnection connection switch(17) is monitored, to determine if the camera is connected to the memory pack, column 7, lines 6-25.), and that further operations are only performed upon such a detection(When proper connection is determined, the process proceeds to the next step, column 7, lines 23-35, figure 8.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to include the detecting means taught by Tokano in the device/apparatus interface taught by Kawamura et al., and have the determining means operative in response to the detection for the benefit of preventing user confusion, and providing valuable feedback in the case of an improper connection(Tokano, column 7, lines 13-25).

Consider claim 69, and as applied to claim 68 above, Kawamura et al. does not explicitly teach of a detection means. However, Tokano teaches that the detecting means further comprises means for detecting disconnection of the device from the apparatus(Disconnection is detected via the disconnection connection switch(17), column 7, lines 13-25.).

Consider claim 70, and as applied to claim 53 above, Kawamura et al. does not explicitly teach a means for detecting a connection of the device to the apparatus.

Tokano similarly teaches an apparatus(camera, 18, figure 6) connected to a device(solid state memory pack, 14b, figure 6), column 6, line 20 through column 7, line 25.

However, in addition to the teachings of Kawamura et al., Tokano teaches a means for detecting a connection of the device to the apparatus(A disconnection connection switch(17) is monitored, to determine if the camera is connected to the memory pack, column 7, lines 6-25.), and that further operations are only performed upon such a detection(When proper connection is determined, the process proceeds to the next step, column 7, lines 23-35, figure 8.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to include the detecting means taught by Tokano in the device/apparatus interface taught by Kawamura et al., and have the determining means operative in response to the detection for the benefit of preventing user confusion, and providing valuable feedback in the case of an improper connection(Tokano, column 7, lines 13-25).

Consider claim 71, and as applied to claim 70 above, Kawamura et al. does not explicitly teach of a detection means. However, Tokano teaches that the detecting means further comprises means for detecting disconnection of the device from the apparatus(Disconnection is detected via the disconnection connection switch(17), column 7, lines 13-25.).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALBERT H. CUTLER whose telephone number is (571)270-1460. The examiner can normally be reached on Mon-Thu (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc-Yen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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